be considered as an asset to en-
the area of communications at our
according to Charbonneau. The
is indeed most interested in break-
n the barriers that exist between
ous bodies involved. "The Council
ably make every effort to establish
ns of communication," said Char-
All interested members of MSOE
ouraged by the SA to contribute
uggestions, and cooperation to the
ion or the Council in order to get
ram underway.
ipation in the Student Association
to all bodies of MSOE: students,
and administrators. President Char-
said, "We will get as much out of
lent Association as we ourselves
the Association."
tudent, for example," said Char-
"will have an opportunity to en-
the political affairs of the school,
ctivities programs, and will have
ances to work in diverse activities,
with the many different people in-
'
Student Association is being de-
s a vehicle of responsible leader-
the student body through the es-
ent of a sound program of commu-
" he said.

P WANTS STUDENT FREEDOM

ton, Texas (ICCN)--The faculty
of the University of Texas at El
TEP) recently named five of its
to serve on a special committee
to cope with questions related to
freedom and responsibility. The
function of the special committee,
g to the public statement, is the
nce of an atmosphere of academic
in the university community.
essential to maintain the right of
nd students to pursue scholarly in-
thout interference by any person or
ose views differ."
tement prepared by the new UTEP
e also commented on student acad-
edom and responsibility: "Freedom
and freedom to learn are insepar-
ts of academic freedom, freedom to
the classroom and on the campus,
e larger community.
nts should exercise their freedom
onsibility."
the essential provisions for a
freedom to learn cited by the com-
ere the freedom to examine and dis-
questions of interest to them and
ss opinions publicly or privately,
rt causes by orderly means which
srupt the regular and essential oper-
the institution; and to invite or hear
t speaker of their choosing on their

ing soon discovers that the results of the very latest research and development are usually not available between the covers of conventional books. The situation is partly the result of the delay involved in producing a hardcover work: the writing, editing, and operations, in particular are complex and time-consuming. It also results from the fact that hardcover publishing is an expensive proposition, and publishers are unwilling to handle an item until its significance and salability are proven.

To overcome these dual obstacles of time lag and expense, the technological community makes extensive use of periodical publication. Particularly, in recent years, the volume of journal publication has increased at a tremendous rate. To provide a key to this vast amount of literature, a number of indexing and abstracting services have been developed. These vary considerably in scope, coverage, and audience.

Among the points which a student should consider before starting on a "literature search" are the following:

1. The period of time to be covered;
2. The nature of the subject--technical or general interest;
3. Level of technical sophistication required--informed layman, student, graduate student, or research;
4. Approach--theoretical or applied--slanted towards pure science or technology;
5. Broadness of the subject;
6. Coverage desired--some indexes cover only English language journals, others include foreign publications;-some cover patents, others do not;—some cover only journals of widespread importance, others cover highly specialized areas.

COLLEGIATES REFUSE DRAFT

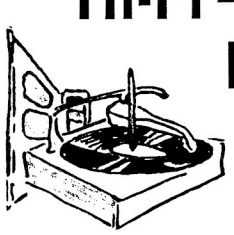
The Reed College Draft Union has sent out press releases to colleges across the nation, listing the 66% of the male seniors at Reed (69 students) that have signed a document stating their refusal to serve in the US armed forces upon graduation. "Our decision is irrevocable," they have said. "Our consciences do not permit us to participate in this senseless and immoral war." A legal fund has been set up to help students brought to trial, and the Reed faculty "has already been contributing generously to this fund." Thirty-nine faculty members have signed the following pledge: "Opposition to our government's policy in Vietnam compels me to support those draft-eligible Americans who have pledged to refuse induction. I believe that their decisions are legitimate acts of conscience opposing an unjust and immoral war. I pledge to support those young men with encouragement, counsel, and financial aid."

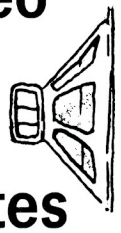
Reed College is in Portland, Oregon.

11 and Thursday, April 18. On the first date, the voting will narrow the field of eligible teachers to five and the second date will be for final judgement. Voting will take place in the TOM office from from 10:00 a.m. to 3:00 p.m. on these dates. Only Senior students qualify to vote. Check the lists posted around school to see if you are eligible to vote.

Mr. George Richards, chairman of the General Studies department, celebrated his 20th year at MSOE on April 1. Commenting on the date, he declined comment.

Hi-Fi — Stereo Notes and Quotes

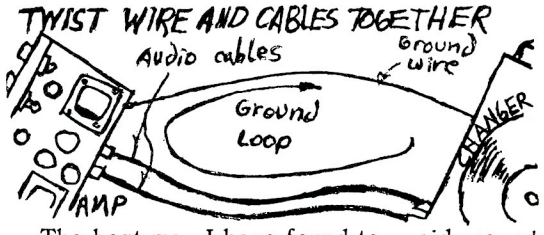




Many people are continually annoyed by the excessive hum from their turntables. These hum problems are often difficult to trace down.

Most of the time, the cause of the hum can be attributed to poorly shielded cables or ground loops. If the record changer and amplifier are grounded in more than one place, a ground loop can form (see diagram).

This ground loop acts like the secondary of a transformer and can cause unwanted hum from stray magnetic fields from transformers or power cords.



The best way I have found to avoid ground loops is to have all the cords except power cord the same length and twist them together. If this is done there will be no ground loop to pick up stray magnetic fields.

This method has worked well on several other stereo systems, including my own, however each system is unique and many methods should be tried to reduce the hum.

Stereophonically yours,
John Bunkfeldt